UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,775	08/31/2001	Mary Lafuze Comer	PU010013	2469

7590 07/29/2004	**EXAMINER**
JOESPH S. TRIPOLI	LE, VU
THOMSON MULTIMEDIA LICENSING INC.	

ART UNIT	PAPER NUMBER
2613	

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DATE MAILED: 07/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/943,775	COMER ET AL.
	Examiner	**Art Unit**	
	Vu Le	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____.
2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-20* is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1,2,15 and 16* is/are rejected.
7) ☒ Claim(s) *3-14 and 17-20* is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on *31 August 2001* is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All b) ☐ Some * c) ☐ None of:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. _____.
    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
       application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date <u>2</u>.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.   Claims 1-2, 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by

Demos, US 5,852,565.

Re claim 1, Demos discloses a video data CODEC system (figs. 8-9) comprising:

a decimate unit for performing DCT-based down-sampling with respect to macro

block data of input video data to produce decimated block data representing low

frequency part of the macro block data (col. 11, lines 29-31, in this segment, the original

image is filtered or down-sampled to ½ resolution in accordance to MPEG-2, which is a

DCT-based filtering);

a first encoder for encoding the decimated block data to produce base layer DCT

data having DCT coefficients representing the low frequency part (fig. 8: after block 81,

col. 11, lines 32-34, in this segment, MPEG-2 compression performs encoding of the

filtered data to generate DCT coefficients data of the base layer, which represents the

low frequency part);

a first decoder for decoding the base layer DCT data from the first encoder to

produce base layer block data (fig. 8: after block 82, col. 11, lines 36-40, in this

segment, MPEG-2 decompression performs decoding of the encoded base layer DCT

data);

an interpolate unit for performing DCT-based interpolation with respect to the

base layer block data from the first decoder to produce interpolated base layer block

data (fig. 8: after block 83, col. 11, lines 38-40, in this segment, DCT-based interpolation

is carried out by MPEG-2 algorithm expanding or spline interpolation);

a second encoder for encoding enhancement layer block data obtained from the

macro block data and the interpolated base layer block data to produce enhancement

layer DCT data, the enhancement layer block data representing high frequency part of

the macro block data (fig. 8: after 86, col. 11, lines 41-56, in this segment, the

enhancement layer block data is obtained by the difference between the interpolated

data i.e., after block 84 and the original data i.e. block 80. Note, enhancement data

represent high frequency part of the original image data at block 80);

and a second decoder for decoding the enhancement layer DCT data from the

second encoder to produce reconstructed macro block data (fig. 9: after block 87, col.

11, lines 57-65).

Re claim 2, the CODEC system of claim 1, wherein the input video data is

spatially scalable (fig. 8: after block 80, the original image gets spatially scaled i.e.,

filtered to ½ resolution, col. 11, lines 29-31).

Re claims 15 and 16, these claims are method claims corresponding to

apparatus claims 1 and 2 respectively. Thus, they have been analyzed and rejected

with respect to claims 1 and 2. Furthermore, Demos discloses an apparatus, but also a

method (see Summary Of The Invention).

Allowable Subject Matter

3.   Claims 3-14, 17-20 are objected to as being dependent upon a rejected base

claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

4.   The following is a statement of reasons for the indication of allowable subject

matter:

The prior art of record fails to anticipate or render obvious the following

limitations as claimed:

Claim 3 further calls for the decimate unit to include a DCT unit for performing

DCT with respect to an input block to produce a block of DCT coefficients; a truncate

unit for selecting a low frequency part of the block of DCT coefficients provided from the

first DCT unit; and a IDCT unit for performing IDCT with respect to the low frequency

part of the block of DCT coefficients selected by the truncate unit to produce an output

block. This type of decimation prior coding is not commonly done.

Claim 6 calls for motion compensation of the decimated block data as resulted

from the decimate unit in claim 3.

Claim 9 calls for an interpolate unit that includes: a DCT unit for converting an

input block into a first block of DCT coefficients; a zero pad unit for padding the first

block of DCT coefficients with zeros to produce a second block of DCT coefficients; and

a IDCT unit for performing IDCT with respect to the second block of DCT coefficients to produce an output block to perform the inverse operation of the decimate unit in claim 3.

Claim 12 calls for another encoder that performs motion compensation on the enhancement layer block data, the enhancement layer data resulted from the input block data and the interpolated block data of the based layer.

Claim 17-20 are allowable consistent with claims 3-14 above.
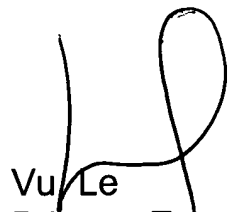
Contact

5.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vu Le whose telephone number is 703-308-6613. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 703-305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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